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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/526,483	03/15/2000	Yoshiyuki Mochizuki	2000-0309A	1664

7590 01/12/2005

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EXAMINER

NGUYEN, PHU K

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/526,483

Applicant(s)

MOCHIZUKI ET AL.

Examiner

Phu K. Nguyen

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Phu K. Nguyen
PHU K. NGUYEN
PRIMARY EXAMINER
GROUP 2400

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 38, 39, 41-44, and 49-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,999, 173 to Ubillos in view of WO 98/52356 to Chang et al and Handelman (6,191,798)

a. Referring to claim 38, Ubillos discloses a user interface unit operable to select a component to be operated by a user from among the plural components and inputting operational contents of the selected component (column 5, lines 33-35; column 8, lines 26-36; Fig. 4 and 5). Ubillos does not explicitly disclose a correction unit operable to generate a corrected stream by replacing the motion data of the selected component with data based on the operational contents inputted by said user interface unit and to output the corrected stream. Chang discloses a correction unit operable to generate a corrected stream by replacing the motion data of the selected component with data based on the operational contents inputted by said user interface unit and to output the corrected stream (page 16, paragraph 4; page 18, paragraph 2; page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain, which allows

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users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

b. Claim 39 is rejected per claim 38. Ubillos does not explicitly disclose a stream data reception unit operable to receive the input stream wherein said correction unit is further operable to correct the input stream by replacing the motion data of the selected component with data based on the operational contents before outputting the corrected stream. Chang discloses a stream data reception unit operable to receive the input stream (Fig. 12; page 22, paragraph 4) wherein said correction unit is further operable

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to correct the input stream by replacing the motion data of the selected component with data based on the operational contents before outputting the corrected stream (page 16, paragraph 4, page 18, paragraph 2; page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain, which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4).

c. Referring to claim 41, Ubillos does not explicitly disclose a reproduction unit operable to decode the corrected stream, which is outputted from the correction unit, to reproduce the computer graphics. Chang discloses a reproduction unit operable to decode the corrected stream which is outputted from the correction unit, to reproduce the computer graphics (Fig. 12; page 23, paragraph 4). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, p. 6, paragraph 4).

d. Referring to claim 42, Ubillos does not explicitly disclose a display unit operable to real-time display the computer graphics reproduced by said reproducing unit. Chang discloses a display unit operable to real-time display the computer graphics reproduced by said reproduction unit (Fig. 12). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4).

d. Referring to claim 43, Ubillos does not explicitly disclose wherein said correction unit is operable to correct the input stream by replacing the motion data of the selected data with data based on the operational contents; Ubillos does not explicitly disclose a user data transmission unit operable to transmit the selected components and the operational contents of the selected component to a second stream correction apparatus; a user data reception unit operable to receive a second component selected by a second user interface unit of the second stream correction apparatus and second operational contents of the second selected component; replacing motion data of the second selected component with data based on the second operational contents before outputting the corrected stream. Chang discloses correction unit is operable to correct

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the input stream by replacing the motion data of the selected data with data based on the operational contents (page 16, paragraph 4; page 18, paragraph 2) page 20, paragraph 3; page 23, paragraph 3); a user data transmission unit operable to transmit the selected components and the operational contents of the selected component to a second stream correction apparatus (Fig. 12; page 22, paragraph 4; page 23, paragraph 1) a user data reception unit operable to receive a second component selected by a second user interface unit of the second stream correction apparatus and second operational contents of the second selected component (Fig. 12; page 22, paragraph 4; page 23, paragraph 1)4 and replacing motion data of the second selected component with data based on the second operational contents before outputting the corrected stream (page 23, paragraph 1; page 19, paragraph 3). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a user data transmission unit, a user data reception unit, and replacing motion data of a second selected component as taught by Chang. The suggestion/motivation for doing so would have been because it would allow users to manipulate vide information over a distributed network, such as the Internet (page 6, paragraph 4).

e. Referring to claim 44, Ubillos discloses a user interface operable to select an object or an object part to be operated by a user from among the plural components and to input operational contents of the selected object or object part (column 5, lines 33-35; column 8, lines 26-36). Ubillos does not explicitly disclose a correction unit operable to

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generate a corrected stream by replacing the motion data of the selected object or object part with data based on the operational contents inputted by said user interface unit and to output the corrected stream. Chang discloses a correction unit operable to generate a corrected stream by replacing the motion data of the selected object or object part with data based on the operational contents and to output the corrected stream (page 16, paragraph 4; page 18, paragraph 24 page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubbilos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubbilos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubbilos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column

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8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

f. Referring to claim 49, Ubillos does not explicitly disclose said computer graphics reproduction apparatus comprising a reproduction unit operable to decode the corrected stream, which is outputted from the correction unit to reproduce the computer graphics. Chang discloses said computer graphics reproduction apparatus comprising a reproduction unit operable to decode the corrected stream, which is outputted from the correction unit to reproduce the computer graphics (Fig. 124 page 23, paragraph 4). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to 'manipulate video information over a distributed network (Chang, page 6, paragraph 4).

g. Referring to claim 50, Ubillos does not explicitly disclose said computer graphics display apparatus comprising a display unit operable to real time display the computer graphics reproduced by said reproduction unit. Chang discloses said computer graphics display apparatus comprising a display unit operable to real time display the computer graphics reproduced by said reproduction unit. (Fig. 12). At the time the

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invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, p. 6, paragraph 4).

h. Referring to claim 51, Ubillos does not explicitly disclose a stream correction apparatus for correcting part of a first stream said stream correction apparatus comprising a user interface unit a correction unit; a user interface unit operable to select a component to be operated by a user from among the plural components and to input operational contents of the selected component (column 5, lines 33-35; column 8, lines 25-37); wherein said correction unit is operable to generate a corrected stream by replacing the motion data of the selected component with data based on the operational contents inputted and to output the corrected stream (Fig. 12, column 8, lines 25-37; column 7, lines 34-43). Ubillos does not explicitly teach a stream transmission apparatus for transmitting a first stream in which motion data of plural components constituting computer graphics are packetized with time information in time sequence. Chang discloses a stream correction apparatus for correcting part of a first stream said stream correction apparatus comprising a user interface unit a correction unit (page 16, paragraph 4; page 18, paragraph 2; page 20, paragraph 34 page 23, paragraph 3) a stream transmission apparatus for transmitting a first stream in which motion data of

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plural components constituting computer graphics are packetized with time information in time sequence (Fig. 12; page 22, paragraph 4; page 23, paragraph 1). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a user data transmission unit, a user data reception unit, and replacing motion data of a second selected component as taught by Chang. The suggestion/motivation for doing so would have been because it would allow users to manipulate vide information over a distributed network, such as the Internet (Page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

Refening to claim 52, Ubillos discloses selecting a component to be operated by a

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user from among the plural components (column 5, lines 33-35); inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents and outputting the corrected stream. Chang discloses correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents and outputting the corrected stream (page 16, paragraph 44 page 18, paragraph 2; page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill

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in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

Referring to claim 53, Ubillos discloses selecting a component to be operated by a user from among the plural components (column 5, lines 33-35); inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted corrected input stream. Chang discloses correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted corrected input stream (page 16, paragraph 44 page 18, paragraph 2; page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5,

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paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

Refening to claim 54, Ubillos discloses selecting a component to be operated by a user from among the plural components (column 5, lines 33-35); inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted

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corrected input stream. Chang discloses correcting the input stream by replacing the motion data of the

selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted corrected input stream (page 16, paragraph 4; page 18, paragraph 2; page 20, paragraph 34 page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have

been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column

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8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

Referring to claim 55, Ubillos discloses selecting a component to be operated by a user from among the plural components (column 5, lines 33-35)) inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents and outputting the corrected stream. Chang discloses correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents outputting the corrected stream (page 16, paragraph 4; page 18, paragraph 2; page 20, paragraph 3; page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to

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correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

m. Referring to claim 56, Ubillos discloses selecting a component to be operated by a user from among the plural components (column 5, lines 33-35); inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted corrected input stream. Chang discloses correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; outputting the corrected stream and reproducing the computer graphics by decoding the outputted corrected input stream (page 16, paragraph 44 page 18, paragraph 24 page 20, paragraph 3) page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify

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the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4).

n. Referring to claim 57, Ubillos discloses selecting a component to be operated by a user from among the plural components (column 5, lines 33-35); inputting operational contents of the selected component (column 8, lines 25-37). Ubillos does not explicitly disclose correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; and outputting the corrected stream and displaying in real time, the reproduced computer graphics. Chang discloses correcting the input stream by replacing the motion data of the selected component with data based on the inputted operational contents; and outputting the corrected stream and displaying in real time, the reproduced computer graphics (page 16, paragraph 4; page 18, paragraph 2) page 20, paragraph 3) page 23, paragraph 3). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by incorporating a correction unit as taught by Chang. The suggestion/motivation for doing so would have been because it would allow editing in the compressed domain which allows users to manipulate a

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specific object without having to fully decode the video (Chang, page 5, paragraph 1) and it would allow users to manipulate video information over a distributed network (Chang, page 6, paragraph 4). Although Chang teaches the correction of the extracted moving object in the video frames (Chang, page 21, paragraph 3), both of Chang and Ubillos references do not specifically teach "the motion data includes a joint angle of the parts and said correction unit is further operable to correct the joint angle". Handelman teaches that the motion data includes a joint angle of the parts of the object (Handelman, column 13, lines 60-62) and said correction unit is further operable to correct the joint angle (Handelman, column 14, lines 14-31). At the time the invention was made it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos and Chang by incorporating a correction unit to correct the joint angles of the extracted moving object using the physical synergies (Handelman, column 8, lines 35-38) as taught by Handelman. The suggestion/motivation for doing so would have been because it would allow the realistic of object motion under different physical constraints (Handelman, col. 8, lines 38-47).

Claims 40, 45, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ubillos in view of Chang and Handelman as applied to claims 39 and 44 above, and further in view of U.S. Patent No. 5,288,993 to Bidiville et al.

a. Referring to claim 40, Ubillos discloses the correction unit is further operable to

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correct the input stream by replacing the motion data with data based on the operational contents inputted by said user interface unit of the selected component before outputting

the correction stream (Fig. 12; column 8, lines 25-37; column 7, lines 34-43). Ubillos does not explicitly disclose a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected component and to output the second data. Bidiville discloses a data conversion unit operable to convert operational contents into second data and to output the second data in place of the operational contents (column 2, lines 52-54). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by including a data conversion unit operable to convert the operational contents into second data and to output the second data in place of the operational contents as taught by Bidiville. The suggestion/motivation for doing so would have been because Ubillos teachings using a pointing device to input instructions to the apparatus (column 5, lines 16-22) and the data conversion unit of Bidiville overcomes the limitations (i.e., accuracy) of the mechanical elements associated with pointing devices (column 2, lines 27-30).

b. Referring to claim 45, Ubillos discloses the correction unit is further operable to correct the input stream by replacing the motion data with data based on the operational contents inputted by said user interface unit of the selected component before outputting

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the correction stream (Fig. 12; column 8, lines 25-37; column 7, lines 34-43). Ubillos does not explicitly disclose a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected component and to output the second data. Bidiville discloses a data conversion unit operable to convert operational contents into second data and to output the second data in place of the operational contents (column 2, lines 52-54). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by including a data conversion unit operable to convert the operational contents into second data and to output the second data in place of the operational contents as taught by Bidiville. The suggestion/motivation for doing so would have been because Ubillos teachings using a pointing device to input instructions to the apparatus (column 5, lines 16-22) and the data conversion unit of Bidiville overcomes the limitations (i.e., accuracy) of the mechanical elements associated with pointing devices (column 2, lines 27-30).

Referring to claim 48, Ubillos does not explicitly disclose further comprising a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output the second data and to use a pre-taught neural network when converting the operational contents into data suited to the motion data of the selected object or object part. Bidiville discloses a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output

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the second data and to use a pre-taught neural network when converting operational data (column 2, lines 49-55). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus of Ubillos by including a data conversion unit which uses a pre-taught neural network to convert the operational data ms taught by Bidiville. The suggestion/motivation for doing so would have been to increase the speed of the conversion process.

Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ubillos in view of Chang and Handelman as applied to claim 44 above in view of Bidiville further in view of U.S. Patent No. 5,793,356 to Svancarek.

a. Refening to claim 46, Ubillos does not explicitly disclose further comprising a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output the second data and to use table conversion data when converting the operational contents into data suited to the motion data of the selected object or object part. Bidiville discloses a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output the second data (column 2, lines 52-54). Svancarek discloses using tabled conversion data when converting operational content (column 12, line 66 - column 13, line 17). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the apparatus

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of Ubillos to incorporate a data conversion unit as taught by Bidiville and to use tabled conversion data as taught by Svancarek. The suggestion/motivation for doing so would have been because Ubillos teaches using a pointing device to input instructions to the apparatus (column 5, lines 16-22) and the data conversion unit of Bidiville overcomes the limitations (i.e., accuracy) of the mechanical elements associated with pointing devices (column 2, lines 27-30) and using tabled conversion data increases the speed of the conversion process.

b. Referring to claim 47, Ubillos does not explicitly disclose further comprising a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output the second data and to use tabled key conversion data when converting the operational contents into data suited to the motion data of the selected object or object part. Bidiville discloses a data conversion unit operable to convert the operational contents into second data suited to the motion data of the selected object or object part and to output the second data (column 2, lines 52-54). As noted above Svancarek discloses using tabled conversion data when converting operational content (column 12, line 66 - column 13, line 17), however

Svancarek does not explicitly disclose interpolating the conversion data. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to further modify the apparatus of Ubillos by interpolating the conversion data. The suggestion/motivation for doing so would have been because it would allow values not

explicitly listed in the table to be converted.

Applicant's arguments filed July 26, 2004 have been mooted because the new reference Handelman teaches the newly added feature of "joint angle" of the parts of object.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

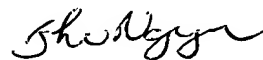
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phu K. Nguyen whose telephone number is (703)305 - 9796. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on (703)305-9798. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phu K. Nguyen
January 05, 2005


PHU K. NGUYEN
PRIMARY EXAMINER
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